

Evaluation of alloantibodies and/or autoantibodies against RBC Antigens in Thalassemia Major and intermedia Patients in Ardabil province

Abstract

Background and objective : patients with Major Thalassemia should continuously receive blood to survive. Continuous transfusion to thalassemic patients causes that immune system of patients faced with a range of new antigens found at the surface of red cell and may produce antibody against these antigens. Transfusion to Alloimmune patients may also have a lot of problems. As a result of identification of alloimmune patient, routine of immune zation agent is effective in successful blood transfusion and also it prevents from alloimmunization prevalence in Thalassemic patients and other patients that continuously received blood transfusion.

Methods: This study is descriptive- In this research 65 patient with Major Thalassemia and intermedia were under study in Ardabil. At first questionnaire completed to determine of date of blood transfusion, Splenectomy, presence or absence of certain underlying diseases and taking certain medication (according to the patient's case). In order to search for Allo antibodies, sample of patients serum adjacent with provided standard cellular panels and antigenic phenotypes of red blood cells determined from antigen type by related anti serum.

Conclusions: Results 210 patients were female and 38 patient were male. Average age of patients is 23.9. 61.3 patients were suffering from major Thalassemia and 36.9 patients were suffering from intermedia Thalassemia. In terms of patient's blood type, abundance is related to blood type A⁺ with 33% abundance and 16.7% patients have Alloimmunization. All of these patients have antibodies against Kell and one patient in addition to Kell has DuffyB and JkA.

Conclusion Result: rate of Alloimmunization was 16.7% in this study. All these patients have antibody against Kell. In this study there are no relation between Alloimmunization and duration of blood Transfusion, age and sex But There are significant relation between Thalassemia type and incidence of alloimmunosteous cases.

Key words: alloimmunosteous, Thalassemia, blood